



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/069,126	07/24/2002	Alain Goux	P22010	3526
7055	7590	12/12/2005	EXAMINER	
GREENBLUM & BERNSTEIN, P.L.C. 1950 ROLAND CLARKE PLACE RESTON, VA 20191			SALVATORE, LYNDIA	
			ART UNIT	PAPER NUMBER
			1771	

DATE MAILED: 12/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/069,126

Applicant(s)

GOUX ET AL.

Examiner

Lynda M. Salvatore

Art Unit

1771

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 15-38 is/are pending in the application.
- 4a) Of the above claim(s) 34-38 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 31-33 is/are allowed.
- 6) ☒ Claim(s) 15-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. Applicant's amendment and accompanying remarks filed 9/30/05 have been fully considered and entered. Claims 31 and 33 have been amended into independent form. Applicant's arguments regarding the obviousness rejections of claims 15-30 are found persuasive, however, upon further consideration a new ground of rejection is set forth herein below.

Response to Arguments

Claim Rejections - 35 USC § 103

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. Claims 15-28 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Riedel et al., US 5,631,073 in view of Young et al., Us 4,833,179.

The patent issued to Riedel et al., teach a non-woven sheet and pressure sensitive adhesive tapes formed therefrom (Abstract). With regard to the felt or needle-bonded limitation, Riedel et al., teach forming a non-woven by physical entanglement or needling (Column 6, 57-62). With regard to the adhesive layer limitation, Riedel et al., teach coating a layer of pressure sensitive adhesive onto the non-woven sheet (Column 9, 22-25). With regard to the rolling and winding limitations, Riedel et al., teach that the non-woven sheet material may be conveyed directly to an adhesive coater, followed by slitting into individual tape rolls. With regard to the limitation of coating the opposite side of the non-woven support with an anti-varnish, Riedel et al., teach the use of a releasable liner that covers the adhesive layer or a release coating, such as a

Art Unit: 1771

low adhesion backsize, coated on the non-adhesive side of the tape to facilitate the winding of the tape into rolls (Column 10, 46-53). With regard to the support thickness limitation, Riedel et al., teach a thickness ranging from .04mm to about .5mm in thickness (Column 6, 31-35). With regard to the surface mass limitations, Riedel et al., teach a weight ranging from 10 g/m² to about 100 g/m² (Column 6,35-41). With regard to the calendaring limitations, Riedel et al., teach pattern embossing or flat calendaring the non-woven sheet (Column 23, 5-25). With regard to the fiber material limitations, Riedel et al., teach a non-woven structure formed from a variety of materials such as polyester staple fibers (Column 5, 8-23). In addition, Riedel et al., also teach employing polyester, polyethylene, polypropylene or polybutylene binder fibers in an amount ranging from 5-50% (Column 5,50-Column 6, 30). With regard to the ratio of polyester to viscose fibers, Riedel et al., teach in various examples illustrating the use of a fiber mixture consisting of 50% PET (polyethylene terephthalate), 30% rayon (viscose), and 20% diawa (binder fibers) (Column 15, table 3).

With regard to the limitation pertaining to the immersion depth of the fibers in the adhesive, Riedel et al., does not specifically teach the degree of adhesive penetration, but does incorporate by reference the Young et al., patent for examples of suitable adhesives and application methods (Riedel et al., column 9, 23-33). Specifically, Young et al., teach applying the adhesive by roller coating, dip coating or extrusion coating (Young et al., column 5, 25-35). According to Applicant's specification, the adhesive is applied by direct coating and the degree of penetration is a function of the adhesive viscosity. Since Applicant has failed to set forth the adhesive composition and only dependently claims the viscosity, it is the position of the

Art Unit: 1771

Examiner that the coating methods taught by Young et al., would result in the claimed immersion depth once the adhesive is coating onto the substrate.

Therefore, motivated by the desire to provide a pressure sensitive adhesive article with suitable adhesiveness it would have been obvious to one having ordinary skill in the art to apply the adhesive to the non-woven substrate of Riedel et al., by any one of the coating methods taught by Young et al.

With regard to the physical property limitations of tearing effort, tearing resistance, modulus at elongation, unrolling effort and elongation break, the combination of prior art fails to explicitly teach these features, however, it is the position of the Examiner that said limitations are inherent to the adhesive tape provided by Riedel et al., in view of Young et al. Support for said presumption is found in the use of like materials (i.e., a non-woven substrate comprising rayon, polyester, PET and pressure sensitive adhesive) and the use of like processes such as roller, dip or extrusion coating, which would result in the claimed tearing effort, tearing resistance, modulus at elongation, unrolling effort and elongation break properties. Applicant is invited to evidence otherwise.

3. Claims 15-30 are stand rejected under 35 U.S.C. 103(a) as being unpatentable over Shaffer et al., US 5,916,393 in view of Riedel et al., US 5,631,073.

The patent issued to Shaffer et al., teach a method of penetrating a porous substrate with pressure sensitive adhesive (Abstract, column 1, 54-60 and column 5, 8-32). Suitable porous substrates include non-woven products (column 7, 31-35). Shaffer et al., teach extruding the adhesive onto the substrate and then subjecting the adhesive to an impingement method such that

Art Unit: 1771

the adhesive penetrates the substrate ranging in distance between .1mm to .13mm (column 1, 65-column 2, 5 and column 5, 31-33).

With regard to claim 29, Shaffer et al., teach a viscosity of ranging from 5,000-80,000 cP (column 3, 55-60). Shaffer et al., specifically teach that the disclosed impingement method improves the bond between the adhesive and the porous substrate (column 4, 45-56).

Shaffer et al., fails to teach the claimed non-woven support features, however, the patent issued to Riedel et al., teach a non-woven sheet and pressure sensitive adhesive tapes formed therefrom (Abstract). With regard to the felt or needle-bonded limitation, Riedel et al., teach forming a non-woven by physical entanglement or needling (Column 6, 57-62). With regard to the adhesive layer limitation, Riedel teach coating a layer of pressure sensitive adhesive onto the non-woven sheet (Column 9, 22-25). With regard to the rolling and winding limitations, Riedel et al., teach that the non-woven sheet material may be conveyed directly to an adhesive coater, followed by slitting into individual tape rolls. With regard to the limitation of coating the opposite side of the non-woven support with an anti-varnish, Riedel et al., teach the use of a releasable liner that covers the adhesive layer or a release coating, such as a low adhesion backsize, coated on the non-adhesive side of the tape to facilitate the winding of the tape into rolls (Column 10, 46-53). With regard to the support thickness limitation, Riedel et al., teach a thickness ranging from .04mm to about .5mm in thickness (Column 6, 31-35). With regard to the surface mass limitations, Riedel et al., teach a weight ranging from 10 g/m² to about 100 g/m² (Column 6,35-41). With regard to the calendaring limitations, Riedel et al., teach pattern embossing or flat calendaring the non-woven sheet (Column 23, 5-25). With regard to the fiber material limitations, Riedel et al., teach a non-woven structure formed from a variety of materials

Art Unit: 1771

such as polyester staple fibers (Column 5, 8-23). In addition, Riedel et al., also teach employing polyester, polyethylene, polypropylene or polybutylene binder fibers in amount ranging from 5-50% (Column 5,50-Column 6, 30). With regard to the ratio of polyester to viscose fibers, Riedel et al., teach in various examples illustrating the use of a fiber mixture consisting of 50% PET (polyethylene terephthalate), 30% rayon (viscose), and 20% diawa (binder fibers) (Column 15, table 3).

Therefore, motivated by the desire to improve the bond strength between the adhesive and the porous non-woven substrate, it would have been obvious to one having ordinary skill in the art at the time the invention was made to apply the high viscosity pressure sensitive adhesive using the method taught by Shaffer et al., to the non-woven substrate taught by Riedel et al. Specification motivation to employ the substrate of Riedel et al., is found in the desire to provide a pressure sensitive non-woven tape product.

With regard to the physical property limitations of tearing effort, tearing resistance, modulus at elongation, unrolling effort and elongation break, the combination of prior art fails to explicitly teach these features, however, it is the position of the Examiner that said limitations are inherent to the adhesive tape provided by Shaffer et al., in view of Riedel et al., Support for said presumption is found in the use of like materials (i.e., a non-woven substrate and pressure sensitive adhesive) and the use of like processes such as impinging a pressure sensitive adhesive into the non-woven substrate, which would result in the claimed tearing effort, tearing resistance, modulus at elongation, unrolling effort and elongation break properties. Applicant is invited to evidence otherwise.

Art Unit: 1771

4. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Riedel et al., US 5,631,073 in view of Young et al., US 4,833,179 as applied to claim 15 above and further in view of Shaffer et al., US 5,916,393.

The combination of Riedel et al., and Young et al., do not teach the claimed viscosity of the pressure sensitive adhesive, however, the patent issued to Shaffer et al., teach applying pressure sensitive adhesive to porous non-woven substrates (Abstract, column 1, 54-60 and column 5, 8-32). Shaffer et al., teach a viscosity of ranging from 5,000-80,000 cP (column 3, 55-60). Specifically, Shaffer et al., teach employing high viscosity adhesives to provide resistance to creep (gradual flow) in the final product at higher temperatures (column 3, 55-60).

Therefore, motivated by the desire to provide resistance to creep (gradual flow) in the final product at higher temperatures, it would have been obvious to one having ordinary skill in the art at the time the invention was made to form the adhesive tape taught by the combination of Riedel et al., in view of Young et al., with the higher viscosity pressure sensitive adhesive taught by Shaffer et al.

Allowable Subject Matter

5. As previously set forth claims 31-33 were objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Applicant has amended claims 31 and 33 such that they are now in independent form. Presently, the prior art does not teach further applying a polyethylene or polyester based powder to the adhesive face. An updated art search produced the closest prior art of Nelson et al., US 5,232,838 which teaches coating a substrate

Art Unit: 1771

with a water based adhesive and a dusting layer of a cold water soluble powder (Abstract).

Nelson et al., however, fails to teach a polyethylene or polyester based powder. Presently, no motivation exists to combine references to form an obviousness type rejection. Thus, claims 31-33 are found allowable.

Conclusion

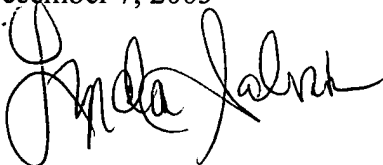
6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lynda M. Salvatore whose telephone number is 571-272-1482. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

December 7, 2005

ls'

A handwritten signature in black ink, appearing to read "Lynda Salvatore", written over the "ls'" text.